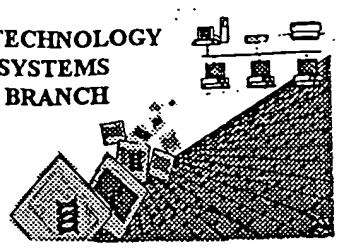

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/042,526
Source: OIPE
Date Processed by STIC: 8-4-04

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 4.2 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm> , **EFS Submission User Manual** - ePAVE)
2. **U.S. Postal Service:** Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. **Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 06/05/04):** U.S. Patent and Trademark Office, 220 20th Street S., Customer Window, Mail Stop Sequence, Crystal Plaza Two, Lobby, Room 1B03, Arlington, VA 22202

Revised 05/17/04

OIPE

RAW SEQUENCE LISTING DATE: 08/04/2004
PATENT APPLICATION: **US/10/042,526** TIME: 10:04:39

Input Set : **A:\pto.lm.txt**
Output Set: **N:\CRF4\08042004\J042526.raw**

SEQUENCE LISTING

```
      4 (1) GENERAL INFORMATION:
E--> 6      (i) APPLICANT: mandatory response needed
      8     (ii) TITLE OF INVENTION: Papilloma Virus Capsomere Vaccine Formulations
      9                              and Methods of Use
E--> 11    (iii) NUMBER OF SEQUENCES: (27) 28 see pg. 5
      13    (iv) CORRESPONDENCE ADDRESS:
      14          (A) ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
      15          (B) STREET: 233 South Wacker Drive, 6300 Sears Tower
      16          (C) CITY: Chicago
      17          (D) STATE: Illinois
      18          (E) COUNTRY: United States of America
      19          (F) ZIP: 60606-6402
      21     (v) COMPUTER READABLE FORM:
      22          (A) MEDIUM TYPE: Floppy disk
      23          (B) COMPUTER: IBM PC compatible
      24          (C) OPERATING SYSTEM: PC-DOS/MS-DOS
      25          (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
      27     (vi) CURRENT APPLICATION DATA:
C--> 28          (A) APPLICATION NUMBER: US/10/042,526
C--> 29          (B) FILING DATE: 29-Apr-2002
      30          (C) CLASSIFICATION:
      32   (viii) ATTORNEY/AGENT INFORMATION:
      33          (A) NAME: Williams Jr., Joseph A.
      34          (B) REGISTRATION NUMBER: 38,659
      35          (C) REFERENCE/DOCKET NUMBER: 27013/34028
      37     (ix) TELECOMMUNICATION INFORMATION:
      38          (A) TELEPHONE: 312-474-6300
      39          (B) TELEFAX: 312-474-0448
```

Does Not Comply
Corrected Diskette Needed

ERRORED SEQUENCES

```
     185 (2) INFORMATION FOR SEQ ID NO: 2:
     187      (i) SEQUENCE CHARACTERISTICS:
     188           (A) LENGTH: (506) amino acids 505 see p.3
     189           (B) TYPE: amino acid
     190           (D) TOPOLOGY: linear
     192      (ii) MOLECULE TYPE: protein
     194      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
     196 Met Ser Leu Trp Leu Pro Ser Glu Ala Thr Val Tyr Leu Pro Pro Val
     197   1               5                  10                  15
     199 Pro Val Ser Lys Val Val Ser Thr Asp Glu Tyr Val Ala Arg Thr Asn
```

RAW SEQUENCE LISTING DATE: 08/04/2004
PATENT APPLICATION: US/10/042,526 TIME: 10:04:39

Input Set : A:\pto.lm.txt
Output Set: N:\CRF4\08042004\J042526.raw

```
200                20                  25                  30
202 Ile Tyr Tyr His Ala Gly Thr Ser Arg Leu Leu Ala Val Gly His Pro
203          35                  40                  45
205 Tyr Phe Pro Ile Lys Lys Pro Asn Asn Asn Lys Ile Leu Val Pro Lys
206      50                  55                  60
208 Val Ser Gly Leu Gln Tyr Arg Val Phe Arg Ile His Leu Pro Asp Pro
209  65                  70                  75                  80
211 Asn Lys Phe Gly Phe Pro Asp Thr Ser Phe Tyr Asn Pro Asp Thr Gln
212                  85                  90                  95
214 Arg Leu Val Trp Ala Cys Val Gly Val Glu Val Gly Arg Gly Gln Pro
215              100                 105                 110
217 Leu Gly Val Gly Ile Ser Gly His Pro Leu Leu Asn Lys Leu Asp Asp
218          115                 120                 125
220 Thr Glu Asn Ala Ser Ala Tyr Ala Ala Asn Ala Gly Val Asp Asn Arg
221      130                 135                 140
223 Glu Cys Ile Ser Met Asp Tyr Lys Gln Thr Gln Leu Cys Leu Ile Gly
224 145                 150                 155                 160
226 Cys Lys Pro Pro Ile Gly Glu His Trp Gly Lys Gly Ser Pro Cys Thr
227                 165                 170                 175
229 Asn Val Ala Val Asn Pro Gly Asp Cys Pro Pro Leu Glu Leu Ile Asn
230              180                 185                 190
232 Thr Val Ile Gln Asp Gly Asp Met Val Asp Thr Gly Phe Gly Ala Met
233          195                 200                 205
235 Asp Phe Thr Thr Leu Gln Ala Asn Lys Ser Glu Val Pro Leu Asp Ile
236      210                 215                 220
238 Cys Thr Ser Ile Cys Lys Tyr Pro Asp Tyr Ile Lys Met Val Ser Glu
239 225                 230                 235                 240
241 Pro Tyr Gly Asp Ser Leu Phe Phe Tyr Leu Arg Arg Glu Gln Met Phe
242                 245                 250                 255
244 Val Arg His Leu Phe Asn Arg Ala Gly Ala Val Gly Glu Asn Val Pro
245              260                 265                 270
247 Asp Asp Leu Tyr Ile Lys Gly Ser Gly Ser Thr Ala Asn Leu Ala Ser
248          275                 280                 285
250 Ser Asn Tyr Phe Pro Thr Pro Ser Gly Ser Met Val Thr Ser Asp Ala
251      290                 295                 300
255 Gln Ile Phe Asn Lys Pro Tyr Trp Leu Gln Arg Ala Gln Gly His Asn
256 305                 310                 315                 320
258 Asn Gly Ile Cys Trp Gly Asn Gln Leu Phe Val Thr Val Val Asp Thr
259                 325                 330                 335
261 Thr Arg Ser Thr Asn Met Ser Leu Cys Ala Ala Ile Ser Thr Ser Glu
262              340                 345                 350
264 Thr Thr Tyr Lys Asn Thr Asn Phe Lys Glu Tyr Leu Arg His Gly Glu
265          355                 360                 365
267 Glu Tyr Asp Leu Gln Phe Ile Phe Gln Leu Cys Lys Ile Thr Leu Thr
268      370                 375                 380
270 Ala Asp Val Met Thr Tyr Ile His Ser Met Asn Ser Thr Ile Leu Glu
271 385                 390                 395                 400
273 Asp Trp Asn Phe Gly Leu Gln Pro Pro Pro Gly Gly Thr Leu Glu Asp
274                 405                 410                 415
```

RAW SEQUENCE LISTING DATE: 08/04/2004
PATENT APPLICATION: **US/10/042,526** TIME: 10:04:39

Input Set : **A:\pto.lm.txt**
Output Set: **N:\CRF4\08042004\J042526.raw**

```
276 Thr Tyr Arg Phe Val Thr Ser Gln Ala Ile Ala Cys Gln Lys His Thr
277             420                 425                 430
279 Pro Pro Ala Pro Lys Glu Asp Pro Leu Lys Lys Tyr Thr Phe Trp Glu
280         435                 440                 445
282 Val Asn Leu Lys Glu Lys Phe Ser Ala Asp Leu Asp Gln Phe Pro Leu
283     450                 455                 460
285 Gly Arg Lys Phe Leu Leu Gln Ala Gly Leu Lys Ala Lys Pro Lys Phe
286 465                 470                 475                 480
288 Thr Leu Gly Lys Arg Lys Ala Thr Pro Thr Thr Ser Ser Thr Ser Thr
289                 485                 490                 495
E--> 291 Thr Ala Lys Arg Lys Lys Arg Lys Leu (*) delete, do not count
292             500                 505          stop codon
338 (2) INFORMATION FOR SEQ ID NO: 4:
340      (i) SEQUENCE CHARACTERISTICS:
341           (A) LENGTH: (98) amino acids  97 (same error)
342           (B) TYPE: amino acid
343           (D) TOPOLOGY: linear
345      (ii) MOLECULE TYPE: protein
347      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
349 Met His Gly Asp Thr Pro Thr Leu His Glu Tyr Met Leu Asp Leu Gln
350   1               5                  10                  15
352 Pro Glu Thr Thr Asp Leu Tyr Cys Tyr Glu Gln Leu Asn Asp Ser Ser
353              20                  25                  30
355 Glu Glu Glu Asp Glu Ile Asp Gly Pro Ala Gly Gln Ala Glu Pro Asp
356          35                  40                  45
359 Arg Ala His Tyr Asn Ile Val Thr Phe Cys Cys Lys Cys Asp Ser Thr
360      50                  55                  60
363 Leu Arg Leu Cys Val Gln Ser Thr His Val Asp Ile Arg Thr Leu Glu
364  65                  70                  75                  80
366 Asp Leu Leu Met Gly Thr Leu Gly Ile Val Cys Pro Ile Cys Ser Gln
367                 85                  90                  95
E--> 369 Lys Pro (*) delete
583 (2) INFORMATION FOR SEQ ID NO: 18:
585      (i) SEQUENCE CHARACTERISTICS:
586           (A) LENGTH: (97) amino acids  96
587           (B) TYPE: amino acid
588           (D) TOPOLOGY: linear
590      (ii) MOLECULE TYPE: protein
592      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 18:
594 Met Ser Leu Leu Thr Glu Val Glu Thr Leu Thr Arg Asn Gly Trp Glu
595   1               5                  10                  15
597 Cys Lys Cys Ser Asp Ser Ser Asp Pro Leu Ile Ile Ala Ala Ser Ile
598              20                  25                  30
601 Ile Gly Ile Leu His Leu Ile Leu Trp Ile Phe Tyr Arg Leu Phe Phe
602          35                  40                  45
604 Lys Cys Ile Tyr Arg Arg Leu Lys Tyr Gly Leu Lys Arg Gly Pro Ser
605      50                  55                  60
607 Thr Glu Gly Ala Pro Glu Ser Met Arg Glu Glu Tyr Arg Gln Glu Gln
608  65                  70                  75                  80
```

RAW SEQUENCE LISTING DATE: 08/04/2004
PATENT APPLICATION: **US/10/042,526** TIME: 10:04:39

Input Set : **A:\pto.lm.txt**
Output Set: **N:\CRF4\08042004\J042526.raw**

```
    610 Gln Ser Ala Val Asp Val Asp Asp Val His Phe Val Asn Ile Glu Leu
    611                  85                  90                  95
E--> 613 Glu (*) delete.
```

(2) INFORMATION FOR SEQ ID NO:28: → last seq. in submitted file.

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 47 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:28:

CATCTGAAGC TTATTGTACG CACAACCGAA GCGTAGAGTC ACACTTG 47

VERIFICATION SUMMARY DATE: 08/04/2004
PATENT APPLICATION: **US/10/042,526** TIME: 10:04:40

Input Set : **A:\pto.lm.txt**
Output Set: **N:\CRF4\08042004\J042526.raw**

L:28 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:29 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:6 M:200 E: Mandatory Header Field missing, [(i) APPLICANT:] of (1) Value not provided
L:291 M:342 E: Invalid Stop Code On Error, STOP CODON:*
L:303 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=3
L:369 M:342 E: Invalid Stop Code On Error, STOP CODON:*
L:369 M:203 E: No. of Seq. differs, LENGTH:Input:98 Found:99 SEQ:4
L:379 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=5
L:393 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=6
L:407 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=7
L:421 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=8
L:436 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=9
L:450 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=10
L:464 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=11
L:478 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=12
L:492 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=13
L:506 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=14
L:520 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=15
L:534 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=16
L:548 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=17
L:613 M:342 E: Invalid Stop Code On Error, STOP CODON:*
L:613 M:203 E: No. of Seq. differs, LENGTH:Input:97 Found:98 SEQ:18
L:623 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=19
L:637 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=20
L:651 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=21
L:665 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=22
L:679 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=23
L:693 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=24
L:707 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=25
L:721 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=26
L:735 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=27
L:751 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=28
L:11 M:203 E: No. of Seq. differs, : Input 27, Counted 28